

AMENDMENTS TO THE SPECIFICATION

Please amend paragraph [0001] as reflected in the following marked-up version of the paragraph:

[0001] The present invention relates to electronic messaging. More specifically, the present invention relates to regulating client requests in an electronic messaging environment.[.]]

Please amend paragraph [0012] as reflected in the following marked-up version of the paragraph:

[0012] The messaging server adaptively generates a wait hint. Generally, a wait hint is data that represents a client is to wait some [[wait]] time before resending the client data request thereby reducing the load at the messaging server. An adaptively generated wait hint can be based on messaging server load, the configuration of a wait hint generation algorithm, how many times a client has ~~previous~~ previously sent the [[a]] client data request, etc. For example, if a client repeatedly sends the same client data request, the messaging server can adaptively increase the wait time represented by the wait hint each time the client data request is received. The server sends a server response that includes the adaptively generated wait hint.

Please amend paragraph [0013] as reflected in the following marked-up version of the paragraph:

[0013] The client receives the server response including the adaptively generated wait hint. The adaptively generated wait hint [[being]] indicates to the client that the messaging server was unable to process the data request. The client waits a specified wait time in accordance with the adaptively generated wait hint to thereby reduce the load on the messaging server. The client resends the data request subsequent to waiting the specified wait time.

Please amend paragraph [0026] as reflected in the following marked-up version of the paragraph:

[0026] Messaging server 121 includes message data 122, access module 124, and wait hint generation module 126. Messaging server 121 can receive client requests for data that is stored in message data 122 (e.g., electronic mail messages corresponding to mail box 123B). When appropriate, messaging server 121 can return requested data to a client. When a data request is

received, access module 124 can determine if messaging server 121 is currently able to process the data request. Access module 124 can refer to a credentials database, measure current server load, refer to access configuration rules, etc., when determining if a request can be processed.

Please amend paragraph [0030] as reflected in the following marked-up version of the paragraph:

[0030] On the other hand, other computer systems (online) can connect to messaging server 121 to access message related data but do not store the accessed message related data. Since these other computer systems do not store message related data, these other computer systems may issue more frequent requests. For example, each time message related data is to be output at a messaging interface (even the same message related data) a new request for the message related data is issued.

Please amend paragraph [0034] as reflected in the following marked-up version of the paragraph:

[0034] The method 200 includes an act of determining that the server is [[us]] unable to process the data request (act 207). For example, access module 124 can determine that messaging server 121 is unable to process sync request 111. Access module 124 can determine that messaging server 121 is unable to process a data request based on the configuration of messaging server 121. For example, access module 124 can make such a determination when messaging server 121 is already processing a specified maximum number of data requests in parallel.

Please amend paragraph [0037] as reflected in the following marked-up version of the paragraph:

[0037] Wait interval configuration 127 can include parameters and parameter values (e.g., name/value pairs) for configuring wait hint generation. For example, wait interval configuration can include values for first through tenth wait hints. Wait interval configuration 127 can also include a value indicating [[a]] how many times the same request can be delayed before the data request is processed. For example, a value in wait interval configuration 127 can indicate that after ten wait hints have been generated for a data request (i.e., the data request has been received

and not processed ten times) the data request is to be processed (even if message server 121 is busy). Accordingly, even when messaging server 121 is under increased load, data requests will eventually be processed.

Please amend paragraph [0040] as reflected in the following marked-up version of the paragraph:

[0040] Although wait interval configuration 127 is depicted separate from wait hint generation module 126, it should be understood that wait interval configuration 127 can be included in wait hint generation module 126. For example, in some embodiments, wait interval configuration 127 can be hard-coded into wait generation module 126. However, in other embodiments, wait interval configuration 127 is external configuration data. In these other embodiments, an administrator can alter parameter values in wait interval configuration 127 to tune messaging server 121 as desired. In yet other embodiments, some portions of wait interval configuration 127 are included in wait hint generate generation module 126, while other portions wait interval configuration 127 are external to wait hint generate generation module 126.

Please amend paragraph [0042] as reflected in the following marked-up version of the paragraph:

[0042] The method 200 includes an act of sending a server response that includes the adaptively generated wait hint (act 209). For example, messaging server 121 can send wait hint 112 to computer system 101. The method 200 includes an act of receiving the server response including the adaptively generated wait hint (act 202). For example, message provider 103 can receive wait hint [[111]] 112 from messaging server 121. Message provider 103 can interface with or include a provider side algorithm that attempts to improve the user experience of user 106 and/or attempts to reduce the load of messaging server 121.

Please amend paragraph [0043] as reflected in the following marked-up version of the paragraph:

[0043] Figure 4 illustrates an example server response message format 400 for sending a wait hint to a client. Field lengths 412 represent example lengths for each field of the example ~~[[server]]~~ server response message format 400. For example, operation identifier 401 can be byte in length, error code 403 can be a double word in length, and size 407 can be a word in length.

Please amend paragraph [0044] as reflected in the following marked-up version of the paragraph:

[0044] Operation identifier 401 indicates the type of operation that was requested (e.g., from a client). Object identifier 402 indicates a server object the operation is being performed on. Error code 403 indicates a resultant error code. For example, in response to message server 121 being unable to process sync request 111, error code 403 can indicate a "server busy" error code. Generally, based on the operation identified by operation identifier 401, a server response message can include variable length operation specific response data 411. For example, state 404, progress 405, steps 406, size 407, and response data 408 can include data associated with the operation identified in operation ~~identified~~ identifier 401. In response to message server 121 being unable to process sync request 111 (e.g., when error code 403 indicates "server busy"), response data 408 can indicate a "wait hint" (e.g., wait hint 112).

Please amend paragraph [0050] as reflected in the following marked-up version of the paragraph:

[0050] On the other hand, if access module 124 determines that messaging server 121 can not process the request, wait hint generation module can generate a new wait hint. Messaging server 121 can send the new wait hint to computer system 101. Message provider ~~[[102]]~~ 103 can receive the new wait hint and wait a specified wait time in accordance with the new wait hint before resending the sync request. Alternately, access module 124 can indicate that the sync request 113 has already been caused to wait a threshold number of times and that sync request 113 is to be processed.

Please amend paragraph [0059] as reflected in the following marked-up version of the paragraph:

[0059] A monitor 347 or other display device is also connected to system bus [[423]] 323 via video interface 348. Monitor 347 can display monochrome and/or color graphical objects, including text, generated by computer system 320. Other peripheral devices (not shown), such as, for example, speakers, printers, and scanners, can also be connected to computer system 320.

Please amend paragraph [0062] as reflected in the following marked-up version of the paragraph:

[0062] Likewise, computer system 320 includes input/output interface 346, through which computer system 320 receives data from external sources and/or transmits data to external sources. Input/output interface 346 is coupled to modem 354 (e.g., a standard modem, a cable modem, or digital subscriber line ("DSL") modem), through which computer system [[430]] 320 receives data from and/or transmits data to external sources. As depicted in Figure 3, input/output interface 346 and modem 354 facilitate the exchange of data with remote computer system 393 via link 352. Link 352 represents a portion of a network and remote computer system 393 represents a node of the network.

Please amend paragraph [0064] as reflected in the following marked-up version of the paragraph:

[0064] In accordance with the present invention, modules, such as, for example, messaging interface 102, message provider 103, access module 124, and wait hint generation module 126, as well as associated program data, such as, for example, sync command 104, mail boxes 123A and 123B, sync requests 111 and 113, message data [[132]] 122, access configuration 128, wait interval configuration 127, wait hint 112, and message data 114, can be stored and accessed from any of the computer-readable media associated with computer system 320. For example, portions of such modules and portions of associated program data may be included in operating system 335, application programs 336, program modules 337 and/or program data 338, for storage in system memory 322.